



April 26, 2017

Tom Moe USS Corporation P.O. Box 417 8771 Park Ridge Dr Mountain Iron, MN 55768

RE: Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1285992

### Dear Tom Moe:

Enclosed are the analytical results for sample(s) received by the laboratory on April 19, 2017. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Melisa M Woods

Massia Wirds

melisa.woods@pacelabs.com

(218)742-1042 Project Manager

Enclosures

cc: Cory Hertling Terri Sabetti, NTS







### **CERTIFICATIONS**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1285992

Virginia Minnesota Certification ID's

315 Chestnut Street, Virginia, MN 55792 Minnesota Dept of Health Certification #: 027-137-445

Alaska Certification UST-107
Alaska Certification UST-107
Alaska Certification UST-107
California Certification #2973

North Dakota Certification: # R-203
Wisconsin DNR Certification #: 998027470
WA Department of Ecology Lab ID# C1007

California Certification #2973 Nevada DNR #MN010842015-1

Alaska Certification #MN01084 Oklahoma Department of Environmental Quality

Arizona Department of Health Certification #AZ0785 California Certification #2973

**Duluth Minnesota Cerification ID's** 

4730 Oneota St., Duluth, MN 55807 Wisconsin DNR Certification # : 999446800

Minnesota Dept of Health Certification #: 027-137-152 North Dakota Certification #: R-105

(218) 742-1042



# **SAMPLE SUMMARY**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1285992

Lab ID	Sample ID	Matrix	Date Collected	Date Received
1285992001	SD 001 Seep 020	Water	04/19/17 10:40	04/19/17 11:35

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# **SAMPLE ANALYTE COUNT**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1285992

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
1285992001	SD 001 Seep 020	EPA 1664A TPH (1999)	DES	1	PASI-DUL
		USGS I-3765	JJH	1	PASI-V



# **ANALYTICAL RESULTS**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1285992

Date: 04/26/2017 02:46 PM

Sample: SD 001 Seep 020	Lab ID:	1285992001	Collected: 04/19/17 10:40			Received: 04/19/17 11:35 Matrix: Water			
Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
1664 SGT-HEM, TPH	Analytical	Method: EPA	1664A TPH	(1999)					
Total Petroleum Hydrocarbons	ND	mg/L	2.9	1.0	1		04/25/17 13:09		
USGS I-3765 TSS	Analytical	Method: USG	S I-3765						
Total Suspended Solids	2.0	mg/L	1.0	1.0	1		04/21/17 10:06		

Qualifiers

Analyzed



### **QUALITY CONTROL DATA**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1285992

QC Batch: 111784

QC Batch Method: EPA 1664A TPH (1999)

Associated Lab Samples: 1285992001

Analysis Method:

Analysis Description:

EPA 1664A TPH (1999)

1664 SGT-HEM, TPH

MDL

METHOD BLANK: 441623 Matrix: Water

Associated Lab Samples: 1285992001

Blank Reporting
Parameter Units Result Limit

Total Petroleum Hydrocarbons mg/L ND 3.0 1.0 04/25/17 11:35

LABORATORY CONTROL SAMPLE: 441624

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Total Petroleum Hydrocarbons mg/L 20 17.9 90 64-132

MATRIX SPIKE SAMPLE: 441625

Date: 04/26/2017 02:46 PM

1286121003 MS Spike MS % Rec Parameter Units Result Conc. Result % Rec Limits Qualifiers <1.1 64-132 Total Petroleum Hydrocarbons 21.3 17.4 80 mg/L

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



### **QUALITY CONTROL DATA**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1285992

QC Batch: 111528 Analysis Method: USGS I-3765

QC Batch Method: USGS I-3765 Analysis Description: USGS I-3765 Total Suspended Solids

Associated Lab Samples: 1285992001

METHOD BLANK: 440990 Matrix: Water

Associated Lab Samples: 1285992001

Blank Reporting
Parameter Units Result Limit MDL Analyzed Qualifiers

Total Suspended Solids mg/L ND 1.0 04/21/17 10:05

LABORATORY CONTROL SAMPLE: 440991

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers **Total Suspended Solids** mg/L 239 234 98 80-120

SAMPLE DUPLICATE: 440992

1285907001 Dup Max **RPD RPD** Parameter Units Result Result Qualifiers 128 6 10 Total Suspended Solids 136 mg/L

SAMPLE DUPLICATE: 440993

Date: 04/26/2017 02:46 PM

1285909001 Dup Max RPD RPD Parameter Units Result Result Qualifiers 34.0 Total Suspended Solids mg/L 35.0 3 10

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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### **QUALIFIERS**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1285992

### **DEFINITIONS**

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

**RPD - Relative Percent Difference** 

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

### **LABORATORIES**

Date: 04/26/2017 02:46 PM

PASI-DUL Pace Analytical Services - Duluth
PASI-V Pace Analytical Services - Virginia



# **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: USS MinnTac NPDES-TB Wk3

Pace Project No.: 1285992

Date: 04/26/2017 02:46 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
1285992001	SD 001 Seep 020	EPA 1664A TPH (1999)	111784		
1285992001	SD 001 Seep 020	USGS I-3765	111528		

Mt. Iron, MN 55768 Address: Required Client Information: Requested Due Date: 1 ITEM # 10 6 ű w 12 SD 001 (Seep 020) Pace Analytical P.O. Box 417 USS Corporation One Character per box.
(A-Z, 0-9 /, -)
Sample lds must be unique **SAMPLE ID** ADDITIONAL COMMENTS Fax: MATRIX
Drinking Water
Waste Water
Waste Water
Product
Soil/Solid
Oil
Wipe
Air
Other
Tissue Purchase Order #:
Project Name: Required Project Information:
Report To: Tom Moe Copy To: TS T AR WILL SE PW MIN BOOK RELINQUISHED BY / AFFILIATION Genlowater ₹ MATRIX CODE (see valid codes to left) SAMPLE TYPE (G=GRAB C=COMP) NPDES-TB Wk3 77,04181-404,01/2462h DATE START SAMPLER NAME AND SIGNATURE TIME COLLECTED SIGNATURE of SAMPLER: PRINT Name of SAMPLER: DATE The Chain-of-Custody is a LEGAL DOCUMENT. All rele CHAIN-OF-CUSTODY / Analytical Re BNO 4-19-17 TIME SAMPLE TEMP AT COLLECTION Pace Quote: Invoice Information:
Attention: # OF CONTAINERS Pace Profile #: Address: Company Name: Pace Project Manager: Unpreserved an post /c H2SO4 andonaline ниоз Preservatives HCI NaOH ACCEPTED BY / AFFILIATION Na2S2O3 heather.zika@pacelabs.com Methanol Other **Analyses Test** Y/N TSS PM: MMW WO#: 1285992 CLIENT: USS CORP DATE Signed: × TRPH 1664 1-9-H 4-19+ DATE Due Date: 05/03/17 TIME 5 Regulatory Agency TEMP in C Residual Chlorine (Y/N) Received on SAMPLE CONDITIONS RES 5 (Y/N) Custody Sealed Cooler (Y/N) Samples Intact (Y/N)



hold, incorrect preservative, out of temp, incorrect containers)

Document Name:

# Sample Condition Upon Receipt Form

Document No.:

F-VM-C-001-Rev.10

Document Revised: 15Mar2016

Page 1 of 1

Issuing Authority:

Pace Virginia, Minnesota Quality Office

Sample Condition Client Name:			Project a	WO#: 1285992
USS CORP		7		The accompanion of the carbon agent and the control of the uncontrol of the sound and
Courier: Fed Ex UPS	USPS	Z	Client	PM: MMW Due Date: 05/03/17
☐Commercial ☐Pace	Other			CLIENT: USS CORP
Tracking Number:				
Custody Seal on Cooler/Box Present?	11-19.	Seals I	ntact?	Yes No Optional: Proj. Due Date: Proj. Name:
Packing Material: Bubble Wrap Bubble B	ags	one [	Other:	Temp Blank? Yes No
Thermometer Used: 🖊 140792808	Type of	Ice:	Wet [	Blue None Samples on ice, cooling process has begun
Cooler Temp Read °C: Cooler Temp Temp should be above freezing to 6°C Correction Face	Corrected ctor:	c: (L	Date and	Biological Tissue Frozen? Yes No NA d Initials of Person Examining Contents:  Comments:
Chain of Custody Present?	Yes	□No	□N/A	1.
Chain of Custody Filled Out?	Yes	□No	□N/A	2.
Chain of Custody Relinquished?	Yes	□No	□N/A	3.
Sampler Name and Signature on COC?	Yes	□No	□N/A	4.
Samples Arrived within Hold Time?	Yes	□No	□N/A	5. If Fecal: <8 hours >8, <24 hours >24 hours
Short Hold Time Analysis (<72 hr)?	□Yes	No	□N/A	6.
Rush Turn Around Time Requested?	□Yes	No	□N/A	7.
Sufficient Volume?	Yes	□No	□N/A	8.
Correct Containers Used?	Yes	□No	□N/A	9.
-Pace Containers Used?	Yes	□No	□N/A	
Containers Intact?	Yes	□No	□N/A	10.
Filtered Volume Received for Dissolved Tests?	□Yes	□No	⊠Ñ/A	11. Note if sediment is visible in the dissolved containers.
Sample Labels Match COC?	Yes	□No	□N/A	12.
-Includes Date/Time/ID/Analysis Matrix: Ut				
All containers needing acid/base preservation will be checked and documented in the pH logbook.	□Yes	□No	Øn/a	See pH log for results and additional preservation documentation
Headspace in Methyl Mercury Container	□Yes	□No	ØN/A	13.
Headspace in VOA Vials ( >6mm)?	□Yes	□No	ØN/A	14.
Trip Blank Present?	□Yes	No	N/A	15.
Trip Blank Custody Seals Present?	Yes	□No	N/A	
Pace Trip Blank Lot # (if purchased):				
CLIENT NOTIFICATION/RESOLUTION				Field Data Required? Yes No
Person Contacted:			[	Date/Time:
Comments/Resolution:				
FECAL WAIVER ON FILE Y N		TEM	DERΔTI	RE WAIVER ON FILE Y N
Project Manager Review:  Note: Whenever there is a discrepancy affecting North Carolin	Va	J L	)	Date: 4/19/17

# Intra-Regional Chain of Custody



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The state of the s		west western				•					SD 001 Seep 020	Item Sample ID	Report To: Melisa M Woods	Pace Analytical Virgini 315 Chestnut Street Virginia, MN 55792 Phone (218)742-1042	ved at:	order:
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<sup>\*\*\*</sup>In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.

	Contract State
,	To have the
1	Pace Analytical
	•

Document Name: Sample Condition Upon Receipt Form

Document No.: F-DUL-C-001-rev.04 Document Revised: 17Apr2017 Page 1 of 1

Issuing Authority: Pace Duluth Minnesota Quality Office

Sample Condition Upon Receipt  Client Name:  Pace VM		1	Project #:	
	USPS Other:_	С	ient	
Tracking Number:				No Optional: Proj. Due Date. Proj. Name:
Custody Seal on Cooler/Box Present? \( \subseteq Yes  \text{No.} \)	Seals	Intact?	Yes	No Optional: Proj. Due Date: Proj. Name:
Packing Material: Bubble Wrap Bubble Bag	gs 🔲 N	lone	Other:_	Temp Blank? ☐Yes ☐No
Thermometer Used: NR-1 161014660	Type of I	ce: 🔼	Wet	Blue None Samples on ice, cooling process has begun
Cooler Temp Read °C: \ \ .O \ Cooler Temp Co	rrected °C	: 1.	0	<b>Biological Tissue Frozen?</b> ☐Yes ☐No ☐NA
Temp should be above freezing to 6°C Correction Factor			Date and	Initials of Person Examining Contents: KH 4/19117
If temperature is ≤0°C, is there evidence of ice formation		No		
'				Comments:
Chain of Custody Present?	Yes	□No	□N/A	1.
Chain of Custody Filled Out?	∑Yes	□No	□N/A	2.
Chain of Custody Relinquished?	Yes	□No	□N/A	3.
Sampler Name and Signature on COC?	Yes	□No	N/A	4.
Samples Arrived within Hold Time?	Yes	□No	□N/A	5. If Fecal:
Short Hold Time Analysis (<72 hr)?	□Yes	No	□N/A	6.
Rush Turn Around Time Requested?	□Yes	No	□N/A	7.
Sufficient Volume?	Yes	□No	□N/A	8.
Correct Containers Used?	Yes	No	□N/A	9.
-Pace Containers Used?	∑Yes	□No	□N/A	
Containers Intact?	Yes	□No	□N/A	10.
Filtered Volume Received for Dissolved Tests?	□Yes	□No	N/A	11. Note if sediment is visible in the dissolved containers.
Sample Labels Match COC?	Yes	□No	□N/A	12.
-Includes Date/Time/ID/Analysis Matrix: WT				
All containers needing acid/base preservation will be checked and documented in the pH logbook.	□Yes	No	N/A	See pH log for results and additional preservation documentation
Headspace in Methyl Mercury Container	Yes	□No	□N/A	13.
Headspace in VOA Vials ( >6mm)?	Yes	No	□N/A	14.
Trip Blank Present?	Yes	No	□N/A	15.
Trip Blank Custody Seals Present?	Yes	No	DN/A	
Pace Trip Blank Lot # (if purchased):				
CLIENT NOTIFICATION/RESOLUTION				.  Field Data Required? Yes No
Person Contacted:				Date/Time:
Comments/Resolution:				
Commency (Cooking)				

FECAL WAIVER ON FILE Y

TEMPERATURE WAIVER ON FILE

Project Manager Review:

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)